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1. (Currently amended) A method for distributed data archiving, comprising the steps of: accessing a patient's patient medical data from a plurality of external sources at least one external source;

segmenting the <u>patient medical</u> data into a plurality of information groups <u>with each</u> information group corresponding to information about a particular patient; and

providing a data archiving system comprised of a plurality of archival storage media; storing said each information groups group onto an archival storage media;

said information groups being stored on said archival storage media with each group having an identification that is unique from that of any other information groups stored within said archival storage media and all other archival storage media from the same or different archive systems, so that said information groups are capable of being independently accessed, within or without the archive data archiving system in which they the information groups were created;

each said information group being stored entirely only on one of said plurality of archival storage media;

encoding a unique identifier on said one of said storage media to uniquely identify that storage media from that of all other storage media;

said encoding step including recording an index file having at least an identifier and a database file on said one of said storage media; and

independently accessing said one of said storage media at a site other than said data archiving system by reading said index file.

- 2. (original) A method according to claim 1, wherein said archival storage media comprise digital versatile disks (DVDS).
- 3. (original) A method according to claim 1, wherein each said archival storage media comprises a self-contained database file for each of said information groups.

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4. (original) A method according to claim 3, wherein said database file is implemented by Digital Image Communications for Medicine (DICOM-3).

- 5. (original) A method according to claim 3, wherein said information groups comprise meta-data and image data.
- 6. (original) A method according to claim 5, wherein each of said archival storage media comprises an embedded image player for viewing the images.
- 7. (original) A method according to claim 5, wherein each of said archival storage media comprises an application for interpreting the meta-data.
- 8. (original) A method according to claim 1, further comprising the step of creating an index file on each of said archival storage media for characterizing said information groups stored thereon.
- 9. (original) A method according to claim 1, further comprising the step of creating an executable program on each of said archival storage media for retrieving said information groups stored thereon.
- 10. (original) A method according to claim 1, further comprising the step of recording said information groups on said archival storage media as near-line and off-line storage.
- 11. (original) A method according to claim 1, wherein a first subset of said archival storage media is provided as on-line storage.
- 12. (original) A method according to claim 1, wherein a second subset of said archival storage media is provided as near-line storage.

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13. (original) A method according to claim 1, wherein a third subset of said archival storage

media is provided as off-line storage.

14. (previously amended) A method according to claim 11, wherein said on-line storage

comprises a hard disk.

15. (previously amended) A method according to claim 12, wherein said near-line storage

comprises a jukebox storage for providing sequentially selectable access to at least one archival

storage media.

16. (previously amended) A method according to claim 13, wherein said off-line storage

comprises shelf storage for said archival storage media.

17. (currently amended) A distributed data archiving system, comprising,

a user interface for controlling the system, said user interface including a processor

for receiving data from a plurality of external sources and segmenting the data into

a plurality of information groups; and

a memory storage comprised of a plurality of separate archival storage media

for storing information groups, said memory storage including an archival storage

media for storing said information groups onto said archival storage media, each said

information group being stored entirely only on one of said plurality of archival

storage media; each information group storage media having an identification that is

unique from that of any other of said information groups storage media stored

thereon or stored on any other archival storage media from the same or different

archive systems, so that said information groups are capable of being independently

accessed, within or without the archive archiving system in which they the

information groups were created;

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the available storage capacity of the media being determined by using a predefined percentage full value for the storage media, wherein the information group is recorded on the storage media if the percentage full value is not exceeded and wherein if the recording of the information group onto the storage media exceeds the percentage full value then a different storage media is selected.

- 18. (original) A distributed data archiving system according to claim 17, wherein said user interface comprises a personal computer.
- 19. (original) A distributed data archiving system according to claim 17, wherein said external source comprises a workstation.
- 20. (original) A distributed data archiving system according to claim 17, wherein said external source comprises a network compatible device.
- 21. (original) A distributed data archiving system according to claim 17, wherein said memory storage comprises on-line, near-line, and off-line storage media.
- 22. (original) A distributed data archiving system according to claim 21, wherein said on-line storage medium comprises a hard disk.
- 23. (original) A distributed data archiving system according to claim 21, wherein said on-line storage medium comprises a redundant array of independent disks.
- 24. (original) A distributed data archiving system according to claim 21, wherein said near-line storage medium comprises a jukebox storage for providing sequentially selectable access to said archival storage media.

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25. (original) A distributed data archiving system according to claim 21, wherein said off-line

storage medium comprises shelf storage for said archival storage media.

26. (original) A distributed data archiving system according to claim 17, wherein said user

interface creates an index file for characterizing all of said information groups to be stored on said

archival storage media and stores said index file and said information groups on said archival storage

media.

27. (original) A distributed data archiving system according to claim 17, wherein said user

interface creates an executable program for retrieving said information groups stored on said archival

storage media and stores said executable program on aid archival storage media.

28. (original) A distributed data archiving system according to claim 17, wherein said archival

storage media comprise digital versatile disks (DVDs).

29. (original) A distributed data archiving system according to claim 17, wherein each said

archival storage media comprises a self-contained database file for each of said information groups.

30. (original) A distributed data archiving system according to claim 29, wherein said database

file is implemented by Digital Image Communications for Medicine (DICOM-3).

31. (original) A distributed data archiving system according to claim 21, further comprising a

media recorder for recording said information groups on said archival storage media as near-line and

off-line archival storage media.

Please add the following new claims:

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32. (new) A method according to claim 1 including independently accessing said one of said storage

media by accessing the storage media at a clinical imaging station allowing the review of archived

images outside of the data archiving system in which it was originally created.

33. (new) A method according to claim 1 including encoding an index file that also has a data

program and an image player.

34. (new) A method according to claim 1 wherein the identifier comprises a volume label.

35. (new) A method according to claim 33 wherein the database file holds all of the meta-data

required to completely describe a procedure or study stored on the storage media.

36. (new) A method according to claim 1 including determining the available storage capacity by

using a predefined percentage full value for the storage media.

37. (new) A method according to claim 36 wherein the information group is recorded on the storage

media if the percentage full value is not exceeded.

38. (new) A method according to claim 37 wherein if the recording of the information group onto

the storage media exceeds the percentage full value then a different storage media is selected.

39. (new) A method according to claim 1 including determining the available storage capacity of the

storage media and comparing the available storage capacity of the storage media to that of the

information group.

40. (new) A distributed data archiving system according to claim 17 wherein a unique identifier is

encoded on said one of said storage media to uniquely identify that storage media from that of all

other storage media, including recording an index file on said one of said storage media.

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41. (new) A distributed data archiving system according to claim 40 wherein the same information group is stored on more than one storage medium having a different unique identifier associated with each.

42. (new) A method for distributed data archiving, comprising the steps of:

accessing patient medical data from a plurality of external sources;

segmenting the patient medical data into a plurality of information groups;

providing a data archiving system comprised of a plurality of archival storage media;

storing each information group onto an archival storage media;

said information groups being stored on said archival storage media with each group having an identification that is unique from that of any other information groups stored within said archival storage media and all other archival storage media so that said information groups are capable of being independently accessed, within or without the data archiving system in which the information groups were created;

each said information group being stored entirely only on one of said plurality of archival storage media by the following sub steps;

determining the available storage capacity of the storage medium,

comparing the available storage capacity of the storage medium to that of the information group that is to be stored,

recording the information group on the selected storage medium only if the size of the information group is smaller than the available storage capacity of the storage medium, and

selecting another storage medium if the size of the information group is larger than the available storage capacity of the storage medium;

encoding a unique identifier on said one of said storage media to uniquely identify that storage media from that of all other storage media;

said encoding step including recording an index file on said one of said storage media; and independently accessing said one of said storage media at a remote site other than said data archiving system by reading said index file.

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43. (new) A distributed data archiving system according to claim 42 wherein the same information group is stored on more than one storage medium having a different unique identifier associated with each.